

Work Order ID 154209

Tuesday, December 06, 2016 2:50:38 PM

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Item ID: D2279 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Step Spacer
Start Date: 1/27/2017 Start Qty: 6.00 ***6*** Cust Item ID:
Required Date: 2/1/2017 Req'd Qty: 6.00 ***6*** Customer:
Reference:

Approvals: Process Plan: **DAS 21 9-89** Date: **DEC 07 2016** Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2279	Rev D								
100	FLOW WATER JET	0.08							
100									
Waterjet	Memo	0.02							
FLOW CNC Waterjet	1-Cut as per Dwg Dwg Rev: D Prog Rev: D 2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110									
QC	Memo	0.01							
Quality Control									
120	QC8- Inspect parts - second check	0.00							
120									
QC	Memo	0.02							
Quality Control									

**DAS
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9-89****DEC 08 2016**

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[illegible]

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Item ID: D2279

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Step Spacer

Start Date: 1/27/2017 Start Qty: 6.00

6

Cust Item ID:

Required Date: 2/1/2017 Req'd Qty: 6.00

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC7-Inspect Chemical Conversion Coat	0.00			DAS 30 9-89	6			JAN 04 2017
160									
QC	Memo	0.01							
Quality Control									
170	Identify as per dwg & Stock Location GA	0.00			DAS 30 9-89	6			JAN 04 2017
170									
Packaging	Memo	0.01							
Packaging	LOCATION : GA								
180	QC21- Final Inspection - Work Order Release	0.00			DAS 21 9-89				JAN 09 2017
180									
QC	Memo	0.10							
Quality Control									

JAN 04 2017

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Picklist Print

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Parent Item: D2279

D2279

Parent Item Name: Step Spacer

Start Date: 1/27/2017

Required Date: 2/1/2017

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev: A New Issue 05-11-07 JLM
IPP Rev: B Now on Waterjet 06-07-03 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.040		Purchased		No		100	sf	69.3200	0.147	0.928421			

M2024T3S 040

2024-T3 .040 sheet

2/16/12/08

Location

Loc Qty

Loc Code

MAT022

69.32

m134532

12

m135032

9.32

m136200

48

1.3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

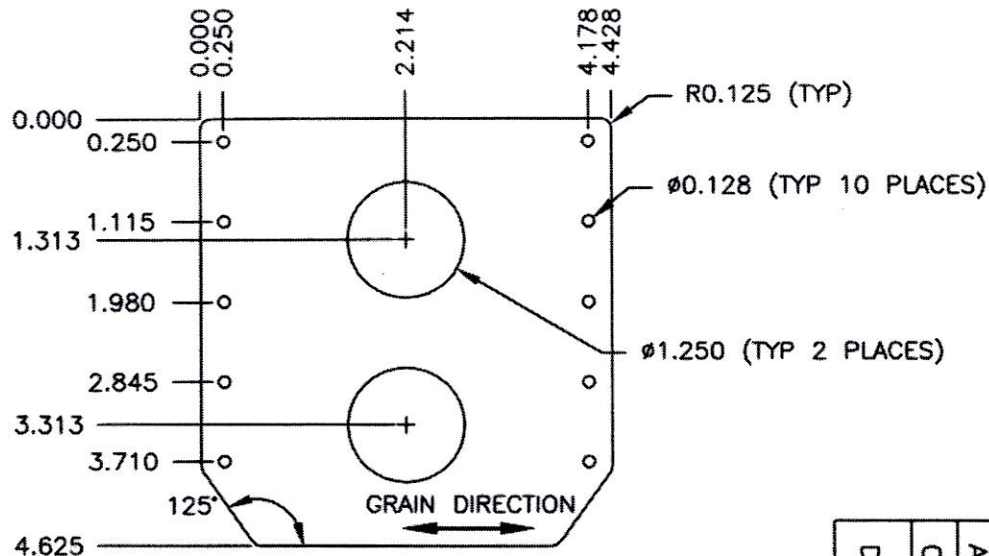
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coor. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																		
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐																		
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
Large Fab ☐	Composite ☐	Supplier ☐																			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval																	
Description Work Order Deviation		Disposition		Completed By																	
				Lead hand / Supervisor Approval Verification																	
				QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																
OTHER : _____																					



DESIGN	DRAWN BY	DART AEROSPACE LTD	REV. D
BW	JP	HAMKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	SHEET 1 OF 1
KE	JP	D2279	
DATE	TITLE	SCALE	
98.10.05	STEP SPACER	1:2	
A	94.10.13	NEW ISSUE	
C	94.11.15	0.588 WAS 1.607 AND 3.861 WAS 4.881	
D	98.10.05	4.428 WAS 4.460, 0.040 WAS 0.032 CHANGES PER TSR A912	



FLAT LAYOUT

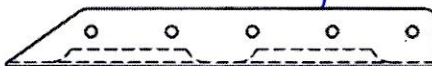
SHOP COPY
RETURN TO
ENGINEERING

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 154209 MWS
16-2-91

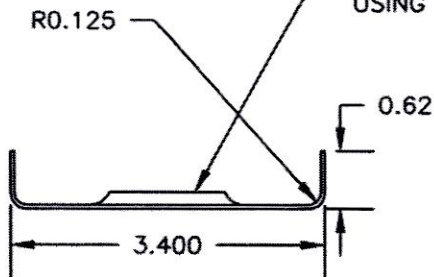
UNDER REVIEW

RELEASED
98.10.08 DS

DESIGN OK, BUT CHECK WITH
TS BEFORE MANUFACTURE
OK 98.11.04



FLANGE AFTER BENDING
TOWARDS INSIDE OF PART
USING DT8174 (2 PLACES)



MATERIAL: 2024-T3 (QQ-A-250/5) 0.040 THICK
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
TOLERANCES PER DART QSI 018 UNLESS OTHERWISE NOTED